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PATENT ABSTRACTS OF JAPAN(21) Application number: **04049267**(51) Intl. Cl.: **H01M 10/44 H01M 2/10 H01M 10/48 H02J 7/00**(22) Application date: **06.03.92**

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states:(71) Applicant: **MATSUSHITA ELECTRIC IND CO LTD**(72) Inventor: **KAKUMA HIDEMITSU
TAROUMARU MAKOTO
TANIGUCHI KENICHI**

(74) Representative:

**(54) BATTERY PACK AND
CHARGING APPARATUS**

(57) Abstract:

PURPOSE: To provide a battery pack and a charging apparatus which can distinguish batteries without increasing the number of connection terminals even if the kinds of the batteries to be connected are increased.

CONSTITUTION: A capacitor 18 having different capacity for each kind of battery packs 16 is set in a battery pack 15, a resistor 26 is put in a charging apparatus 22, the charging time by both the capacitor 18 and the resistor 26 is measured by a microcomputer 30, the kind of the battery pack 16 is distinguished based on the measured time, and an instruction is given to a charging current supplying means 29 to supply proper charging current for the battery pack 16.

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